

Commonwealth of Kentucky
Division for Air Quality
EXECUTIVE SUMMARY

FINAL

Conditional Major, Construction / Operating

Permit: F-06-062

Wilco Refining, LLC.

Albany, KY 42602

December 20, 2007

Sukhendu K. Majumdar, Reviewer

SOURCE ID: 21-053-00012

AGENCY INTEREST: 4298

ACTIVITY: APE20060001

Wilco Refining, LLC has submitted a permit renewal application that was received by the Division for Air Quality on August 22, 2006. Wilco Refining, LLC at Albany, KY is a petroleum refinery facility (SIC code 2911) which will be processing crude oil from the drilling wells owned by the company. Crude oil processing capacity has been listed as of 2,520 barrels per day. Presently the facility is not operating. The Division for Air Quality issued an initial conditional major operating permit to the facility on May 17, 2002. Wilco Refining is now planning to start operating the refinery in 2007 and has applied for renewal of the operating permit (F-02-007).

SOURCE DESCRIPTION:

Wilco Refining, LLC is a petroleum refinery that has accepted permit limits and conditions to preclude the applicability of 401 KAR 52:020 Title V Permit and 40 CFR 63, Subpart CC. The VOC emissions shall not equal or exceed 90 tons per year.

Crude oil is transferred to one of two large fixed roof storage tanks that will have control devices in place per a compliance schedule (180 days after operation begins). The crude oil is heated in crude oil heater and fed to a distillation tower where fractions of petroleum distillates, gasoline, kerosene, diesel and tar are produced and pumped to separate storage tanks. These storage tanks also have control devices of either an internal floating roof or connected to a blow-down device. The blow-down device and displaced air during the truck loading operation is fed to a flare.

The reformer heater would use only propane when built. Process gas is burned in the distillation tower heaters. There are no cracking operations or sulfur recovery units. There is a sulfur removal unit with two towers in series, just prior to the distillation tower. The sulfur removal towers contain metal shavings that are supposed to remove sulfur, but this is an unproven technology and emission calculations are not clear, possibly non-existent.

Wilco Refining, LLC has not been in operation since 2000. The facility was recently sold and is now a privately owned company that also owns an oil-drilling company. Refining operation has been grouped into five principal areas:

1. Refining Processing Area
2. Storage Tanks and Flare
3. Indirect Fired process Heaters and Exchangers
4. Truck Loading/unloading Operations
5. Truck Haul Road

PUBLIC AND U.S. EPA REVIEW:

On November 8, 2007, the public notice on availability of the draft permit and supporting material for comments by persons affected by the plant was published in *The Albany Clinton County News*, Kentucky. In addition, notification of the issuance of the draft permit was sent to the U.S. EPA on October 30, 2007 via e-mail. The public comment period expired 30 days from the date of publication. No comments were received during this period. The permit is now being issued final.